

1 1. (currently amended) A method operative in a system in which a set of
2 distributed servers accept file submissions, comprising:
3 in response to receipt of a submission of a file at a given server, communicating the
4 file from the given server to other servers in the set to which the given server has
5 connectivity;

6 if within a first timeout period the file has been successfully communicated from
7 the given server to the other servers in the set, accepting the submission at the given server
8 only if within a second timeout period a given subset of the other servers reach an
9 agreement to the submission, where the agreement is determined using a data exchange
10 protocol that includes sub-steps as follows:

11 passing a bit vector from a first server to a second server, the bit vector
12 including a first indication that the first server has knowledge of the file;

13 upon receipt of the bit vector at the second server, having the second server
14 modify the bit vector to include, together with the first indication, a second
15 indication that the second server also has knowledge of the file;

16 having the second server pass the bit vector, which includes the first and
17 second indications, to one or more other servers in the given subset; and

18 upon a given state being reached, as indicated by at least the first and second
19 indications in the bit vector, determining that the agreement has been reached
20 within the second timeout period; and

21 upon acceptance of the submission, staging the file for subsequent transport.

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23 2. (cancelled)

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25 3. (cancelled)

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27 4. (cancelled).

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29 5. (cancelled)

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1 6. (cancelled)

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3 7. (original) The method as described in Claim 1 wherein the given subset of
4 the set of servers is a quorum.

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6 8. (original) The method as described in Claim 7 wherein the quorum is a
7 majority.

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9 9. (previously presented) A method operative in a system comprising a set of
10 distributed servers, wherein each server has the capability of accepting a file submission,
11 comprising:

12 in response to receipt at a given server of a request to submit a file, having the
13 given server determine its connectivity to other servers of the set;

14 encoding given information about the file into a temporary identifier;

15 having the given server push the file and its associated temporary identifier to each
16 of the other servers to which the given server has connectivity;

17 if the file has been successfully pushed to each of the other servers within a first
18 timeout period, having the given server initiate a data exchange protocol to each of the
19 other servers to which the given server has connectivity, where the data exchange protocol
20 includes sub-steps as follows:

21 passing a knowledge bit vector among the given server and the other
22 servers;

23 having each server that receives the knowledge bit vector modify the
24 knowledge bit vector to indicate that server's knowledge of the file;

25 based on the knowledge bit vector as modified, determining whether a
26 quorum of the servers have reached a given state within a second timeout period;
27 and

28 if the quorum of servers reach the given state within the second timeout
29 period, accepting the file for submission.

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1 10. (original) The method as described in Claim 9 wherein the temporary
2 identifier comprises given information, the given information selected from a set of
3 information that includes a filename, a timestamp, an identifier for the server at which the
4 request is received, and a random string.

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6 11. (cancelled)

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8 12. (cancelled)

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10 13. (original) The method as described in Claim 9 wherein the quorum is a
11 majority.

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13 14. (original) The method as described in Claim 9 wherein the quorum is a
14 given subset of the set of servers.

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16 15. (previously presented) The method as described in Claim 9 further
17 including:

18 at each server of the quorum and after the file is accepted:

19 removing the temporary identifier; and

20 storing the file persistently in a local file system.

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22 16. (previously presented) The method as described in Claim 15 further
23 including staging the file for subsequent delivery.

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25 17. (previously presented) The method as described in Claim 9 further including
26 having the given server issue a reply to a requesting client that the file submission was
27 successful.

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29 18. (previously presented) The method as described in Claim 9 wherein the first
30 timeout period is a function of a size of the file.

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2 19. (previously presented) The method as described in Claim 1 wherein the first
3 timeout period is a function of a size of the file.
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5 20. (previously presented) The method as described in Claim 1 wherein the
6 given server communicates with at least one other server in the set over a secure link.
7

8 21. (previously presented) The method as described in Claim 9 wherein the
9 given server communicates with at least one other server in the set over a secure link.
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11 22. (previously presented) The method as described in Claim 1 wherein the file
12 is one of: a configuration file, and a control file.
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14 23. (previously presented) The method as described in Claim 1 wherein each of
15 the servers in the set accepts file submissions.
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17 24. (previously presented) The method as described in Claim 1 wherein each of
18 the servers in the set accepts file submissions.
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